

U.S. Pat. App. Serial No. 10/718,926

AMENDMENT

Claims 1-173 (canceled).

174. (Original) A method of producing a modulated beam of light suitable for projection of video images, comprising:

- [a] providing a first initial beam of light having randomly changing orientations of the selected component of the electric field vectors;
- [b] integrating the first initial beam of light to form a second initial beam of light having a substantially uniform flux intensity across substantially the entire second initial beam of light;
- [c] collimating the second initial beam of light into an initial collimated beam of light having randomly changing orientations of the selected component of the electric field vectors and a substantially uniform flux intensity across substantially the entire second initial beam of light
- [d] removing from the initial collimated beam of light at least a portion of ultraviolet and infrared to produce an initial collimated beam of white light and directing the removed portions to a beam stop whereby the removed portion is absorbed;
- [e] resolving from the initial collimated beam of white light an initial collimated first resolved beam of white light having substantially a first single selected predetermined orientation of a chosen component of the electric field vectors and an initial collimated second resolved beam of white light having substantially a second single selected predetermined orientation of a chosen component of the electric field vectors, whereby the first and second single selected predetermined orientation of the chosen component of the electric field vectors are different from one another;
- [f] forming from the initial collimated first resolved beam of white light and initial collimated second resolved beam of white light a substantially collimated rectangular initial single beam of white light having substantially the same single selected predetermined orientation of a chosen component of the electric field vectors across substantially the entire beam of light and a substantially uniform flux intensity across substantially the entire initial collimated single beam of white light;

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[g] separating the collimated rectangular initial single beam of white light into two or more separate collimated rectangular beams of color whereby each of the separate collimated rectangular beam of color has the same single selected predetermined orientation of a chosen component of the electric field vectors as that of the other separate collimated rectangular beams of colors and each separate collimated rectangular beam of color having a different color from the other separate collimated rectangular beams of colors;

[h] adjusting the color by removing at least a predetermined portion of color of at least one of the separate collimated rectangular beam of colors and directing the removed portion to a beam stop whereby the removed portion is absorbed;

[i] altering the single selected predetermined orientation of the chosen component of the electric field vectors of a plurality of portions of each separate collimated rectangular beam of color by passing a plurality of portions of each separate collimated rectangular beam of color through a respective one of a plurality of altering means whereby the single selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each separate beam of color is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy passes through the respective one of the plurality of altering the single selected predetermined orientation of a chosen component of the electric field vectors;

[j] combining the altered separate collimated rectangular beams of color into a single collimated rectangular collinear color beam without substantially changing the altered selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each separate collimated rectangular beam of color;

[k] resolving from the single collimated rectangular collinear color beam a first collimated rectangular resolved color beam having substantially a first single selected predetermined orientation of a chosen component of the electric field vectors and second collimated rectangular resolved color beam having substantially a second single selected predetermined orientation of a chosen component of the electric field vectors, whereby the first and second single selected predetermined orientation of the chosen component of the electric field vectors are different from one another; and

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[l] passing one of the first collimated rectangular or second collimated rectangular resolved color beam to a projection means.

175. (Original) A system of producing a modulated beam of light suitable for projection of video images, comprising:

[a] means for providing a first initial beam of light having randomly changing orientations of the selected component of the electric field vectors;

[b] means for integrating the first initial beam of light to form a second initial beam of light having a substantially uniform flux intensity across substantially the entire second initial beam of light;

[c] means for collimating the second initial beam of light into an initial collimated beam of light having randomly changing orientations of the selected component of the electric field vectors and a substantially uniform flux intensity across substantially the entire second initial beam of light;

[d] means for removing from the initial collimated beam of light at least a portion of ultraviolet and infrared to produce an initial collimated beam of white light and directing the removed portions to a beam stop whereby the removed portion is absorbed;

[e] means for resolving from the initial collimated beam of white light an initial collimated first resolved beam of white light having substantially a first single selected predetermined orientation of a chosen component of the electric field vectors and an initial collimated second resolved beam of white light having substantially a second single selected predetermined orientation of a chosen component of the electric field vectors, whereby the first and second single selected predetermined orientation of the chosen component of the electric field vectors are different from one another;

[f] means for forming from the initial collimated first resolved beam of white light and initial collimated second resolved beam of white light a substantially collimated rectangular initial single beam of white light having substantially the same single selected predetermined orientation of a chosen component of the electric field vectors across substantially the entire beam of light and a substantially uniform flux intensity across substantially the entire initial collimated single beam of white light;

[g] means for separating the collimated rectangular initial single beam of white light into two or more separate collimated rectangular beams of color whereby

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each of the separate collimated rectangular beam of color has the same single selected predetermined orientation of a chosen component of the electric field vectors as that of the other separate collimated rectangular beams of colors and each separate collimated rectangular beam of color having a different color from the other separate collimated rectangular beams of colors;

[h] means for adjusting the color by removing at least a predetermined portion of color of at least one of the separate collimated rectangular beam of colors and directing the removed portion to a beam stop whereby the removed portion is absorbed;

[i] means for altering the single selected predetermined orientation of the chosen component of the electric field vectors of a plurality of portions of each separate collimated rectangular beam of color by passing a plurality of portions of each separate collimated rectangular beam of color through a respective one of a plurality of altering means whereby the single selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each separate beam of color is altered in response to a stimulus means by applying a signal means to the stimulus means in a predetermined manner as the plurality of portions of each of the substantially collimated separate beams of electromagnetic energy passes through the respective one of the plurality of altering the single selected predetermined orientation of a chosen component of the electric field vectors;

[j] means for combining the altered separate collimated rectangular beams of color into a single collimated rectangular collinear color beam without substantially changing the altered selected predetermined orientation of the chosen component of the electric field vectors of the plurality of portions of each separate collimated rectangular beam of color;

[k] means for resolving from the single collimated rectangular collinear color beam a first collimated rectangular resolved color beam having substantially a first single selected predetermined orientation of a chosen component of the electric field vectors and second collimated rectangular resolved color beam having substantially a second single selected predetermined orientation of a chosen component of the electric field vectors, whereby the first and second single selected predetermined orientation of the chosen component of the electric field vectors are different from one another; and

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[1] means for passing one of the first collimated rectangular or second collimated rectangular resolved color beam to a projection means.

Claims 176-438 (canceled).